

IN THE SPECIFICATION

Please amend the paragraph at page 19, beginning at line 28, as follows:

Therefore, during the execution of the pre-scan, a fluoroscopic image acquired by the ~~pres-can~~ ~~pre-scan~~ under a planned sampling rate based on an experimental value is displayed in real time. The data of the fluoroscopic image is then subjected to differential processing to extract the skeleton of the X-ray contrast agent at respective imaging positions. Hence, a difference image between the skeleton images extracted at this time of imaging position (plural sampling timings  $t_n$ ) and the last imaging position (plural sampling timings  $t_{n-1}$ ) is produced. How to produce the difference image is pictorially exemplified in FIG. 15(a) to (c). Based on this difference image, a collimating opening at a certain imaging position (as shown in FIG. 15(c), in which a region RG enclosed by a dashed line shows an optimum collimating opening) can be decided and a flow speed of the X-ray contrast agent can be calculated.